

WHAT IS CLAIMED IS:

1. A multi-domain vertical alignment liquid crystal display, comprising at least:
a first substrate, having a plurality of thin-film transistors, a plurality of
protrusions and a plurality of pixel electrodes thereon, wherein the pixel electrodes
5 formed on the protrusions have a plurality of slits, and the first substrate further includes
a planarized dielectric layer on the protrusions and the slits;
a second substrate; and
a liquid crystal layer disposed between the first substrate and the second
substrate.

2. The multi-domain vertical alignment liquid crystal display according to claim
1, wherein the first and second substrates include glass substrates.

3. The multi-domain vertical alignment liquid crystal display according to claim
15 1, wherein the first substrate includes a thin-film transistor array substrate.

4. The multi-domain vertical alignment liquid crystal display according to claim
1, wherein the second substrate has a plurality of black matrices and color filters.

20 5. The multi-domain vertical alignment liquid crystal display according to claim
1, wherein extension directions of the protrusions and the slits are parallel to each other.

6. The multi-domain vertical alignment liquid crystal display according to claim 1, wherein extension directions of the protrusions and the slits are not parallel to each other.

7. The method according to claim 1, wherein the protrusions and the slits are alternately arranged.

8. The multi-domain vertical alignment array liquid crystal display according to claim 1, wherein the pixel electrodes on the protrusions are exposed while the dielectric layer is planarized.

9. The multi-domain vertical alignment array liquid crystal display according to claim 1, wherein the dielectric layer covers the pixel electrodes on the protrusions with a thickness thinner than that of the dielectric layer in other positions.

10. A thin-film transistor array substrate, comprising:

a substrate;

a plurality of thin-film transistors formed on the substrate to provide an electric field;

a plurality of pixel electrodes covering the protrusions and having a plurality of slits alternately arranged with the protrusions; and

a dielectric layer, covering the pixel electrodes and the slits, the dielectric layer having a planarized surface.

11. The multi-domain vertical alignment liquid crystal display according to claim 10, wherein the thin-film transistor array substrate includes a glass substrate.

12. The multi-domain vertical alignment liquid crystal display according to claim 10, wherein extension directions of the protrusions and the slits are parallel to each other.

13. The multi-domain vertical alignment liquid crystal display according to claim 10, wherein extension directions of the protrusions and the slits are parallel to each other.

14. The multi-domain vertical alignment liquid crystal display according to claim 10, wherein protrusions and the slits are alternately arranged with each other.

15. The multi-domain vertical alignment liquid crystal display according to claim 10, wherein the pixel electrodes on the protrusions are exposed.

16. The multi-domain vertical alignment liquid crystal display according to claim 10, wherein the dielectric layer covers the pixel electrodes on the protrusions with a thickness thinner than the dielectric layer in other positions.